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From: Ham-Ant Mailing List and Newsgroup <ham-ant@ucsd.edu>
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Subject: Ham-Ant Digest V93 #55
To: Ham-Ant

Ham-Ant Digest Wed, 22 Sep 93 Volume 93 : Issue 55

Today's Topics:

 helpful weatherproofing trick
 Kill the Rubber Duck!

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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Tue, 21 Sep 1993 17:55:00 GMT
From: mentor.cc.purdue.edu!sage.cc.purdue.edu!aj@purdue.edu
Subject: helpful weatherproofing trick
To: ham-ant@ucsd.edu

PlastiKote takes automotive paint fairly well. As part of a class at
Purdue University, I made a 900MHz Yagi, encased it in a fiberglass screen
case, then painted PlastiKote onto it (to make it more asthetic to the
apartment owner, who graciously mounted it outdoors for us). The final
step was to get some Ford automotive paint, and give it 4 coats. I used
white to reflect heat a bit better.

At the end of 1 year of exposure, the paint had worn off at one place
where the wind usually tore at it (yes, tore, as in 50+MPH sometimes),
and faint cracks in the auto paint elsewhere. They were very thin, and a
thicker coat of paint would have helped. The interior of the antenna stood
up to everything, and was never breached. The mast and mounting hardware
suffered significantly more damage, because they rusted in spots which
got scratched prior to installation.

In hindisght, the PlastiKote shrank about 1/32", which left the wood

boom exposed in a couple places at the back end of the array, but due to the adherent properties, the cracks simply didn't open up more after they were settled.

The antenna was exposed at a height of about 35 feet for four seasons, with minimum temperatures of -2degF, and highs of 102degF, moisture contents from 10% to 100%, winds from calm to 50MPH (with stronger gusts), icing conditions occurred about 10 days in the year it was exposed (large quantities of ice (observable from the ground) collected on the antenna), and birds often perched on the top part where the PlastiKote covered the spaces in the array. There was no noticeable sun damage, thanks to the auto paint on the outside.

We used red PlastiKote so it would be immediately apparent to a ground-based observer that there was damage.

: John Dormer
: aj@sage.cc.purdue.edu

Date: 21 Sep 93 15:54:32 GMT
From: psinntp!sunsvr6!jdc@uunet.uu.net
Subject: Kill the Rubber Duck!
To: ham-ant@ucsd.edu

In article <CDI59H.ELH@wang.com>, Dave Bushong <dbushong@wang.com> wrote:
>ritterbus001@wctsub.ctstateu.edu writes:

>

>(deleted)

>

>An end-fed half wave requires no such 'ground plane' since it is
>voltage fed. That is how on-glass (auto) antennas can get away with
>that. In fact, the two plates on either side of the glass act as the
>plates in the series matching capacitor. This capacitor (and a tapped
>inductor also) are necessary because the feedpoint impedance is quite
>high, so you just can't plug it into a BNC connector without some kind
>of matching network. But that's all it takes, and a half-wave 2-meter
>antenna is worlds better than the duckie. It's even better than a
>(longer) 5/8, since that needs a ground, which isn't available from a
>hand-held such as the HTX-202.

>

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>73,
>Dave

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>--

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Could you elaborate on the tuning network for a 1/2 wave end-fed
antenna? It sounds like a great construction project.

73...Jim N2VNO

End of Ham-Ant Digest V93 #55
